



# ORON VERTICAL

Large areas, higher efficiency, less  
maintenance



**GESTIRIEGO**



**FILTRATION**





# VERTICAL ORV MODEL

The **ORON** filters, thanks to their automatic cleaning equipment with a hydraulic suction nozzle system, do not require the interruption of the filtering phase for cleaning, thus avoiding pressure losses in the system during the washing process

Simpler equipment for greater efficiency, specially designed to meet the most demanding systems' requirements.

## DESCRIPTION

The ORV filtering equipment comes with an automatic cleaning system in which the filtering element or mesh works automatically by means of a hydraulic system with suction nozzles. ORV is specially designed to meet the needs of the most demanding systems.

This equipment is perfect for systems with medium flow rates requiring professional filtration.

The filters can work individually or in a set (in case the flow rates are very high or the water contains a high load of dirt, which makes it necessary to increase the filtering area). The filter is fully equipped. Therefore, only the inlet, outlet and drain connections have to be installed, along other components supplied, which must be assembled according to specifications.



## PARTS AND MATERIALS



PARTS AND MATERIALS		
	NAME	MATERIAL
1	Piston	SST
2	Valve	Reinforced polyamide
3	Pressure gauge	
4	O-ring	NBR
5	Turbine	SST
6	Manifold	SST
7	Nozzles	PE
8	Thermowelded mesh	HDPE + SST
9	Body	Thermo-lacquered carbon steel
10	Solenoid	
11	Timer	

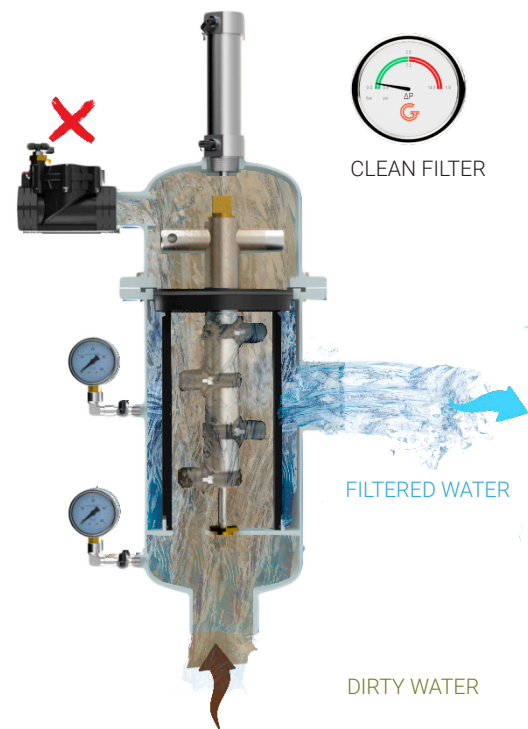
\*Washing unit

## OPERATION

### FILTERING PHASE

Dirty water enters through the inlet located in the lower part, flowing through the mesh filter. Dirt larger than the size established by the filtration degree is retained on the inner surface of the mesh. Filtered water exits the filter outlet in optimum conditions for use, avoiding damages to the system.

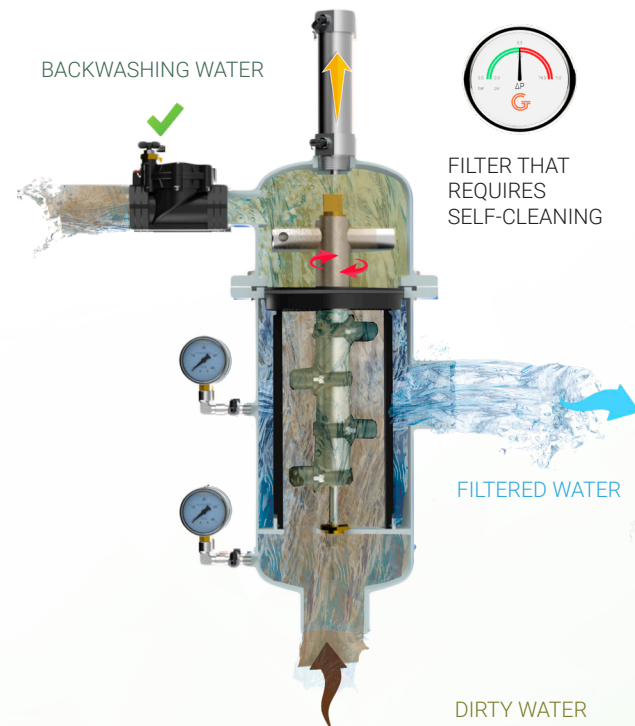
*\*Maximum working pressure: 10 bar.*



### AUTOMATIC SIMULTANEOUS CLEANING PHASE

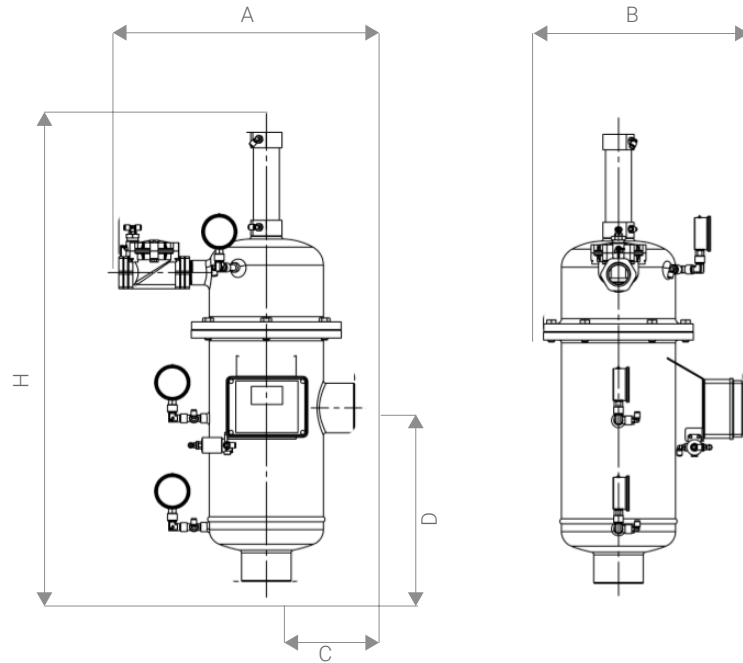
As dirt accumulates on the walls of the mesh, a pressure difference is generated between the clean and dirty water flows. Once the pressure difference established in the timer (recommended difference: 0.5 bar) is reached, the filter cleaning cycle starts automatically. This cycle activates a nozzle set connected to a manifold (washing unit) and they suck the dirt adhered to the mesh surface and release the dirt outside. During the cleaning process, the wash unit moves in a helical motion which is caused by the combination of rotational and translational motions, thus resulting in mesh scanning. Once the cleaning cycle finishes and the pressure difference is compensated, the filter returns to its initial position until another cycle starts.

*\*Important: minimum cleaning pressure: 2 bar.*



# TECHNICAL DATA

SIZES		
	3"	4"
	mm	mm
<b>H</b>	870	1.023
<b>A</b>	454	500
<b>B</b>	385	400
<b>C</b>	170	185
<b>D</b>	335	425



ORV AUTOMATIC MESH FILTERS WITH CARBON BODY AND STAINLESS STEEL MESH								
MODEL	CONNECTION	MAX. WORKING PRESSURE	MIN. WORKING PRESSURE	MAX. TEMP.	MAX. FLOW	FILTERING AREA	INLET/OUTLET DIAMETER	CODE
		bar	bar	°C	m3/h	cm2	mm	
<b>ORV3"</b>	3" ROSCA	10	2	50 °C	35	1.200	85,3	461746
<b>ORV4"</b>	4" BRIDA	10	2	50 °C	70	1.800	100	461747

CLEANING TIME	
SIMPLE CYCLE	NOTE
20 sec.	Washing times may vary depending on the working pressure and regulation of the piston needle valve

CLEANING VALVE	
MODEL	SIZE
<b>ORV3"</b>	1- 1/2" VICTAULIC
<b>ORV4"</b>	1-1/2 " VICTAULIC





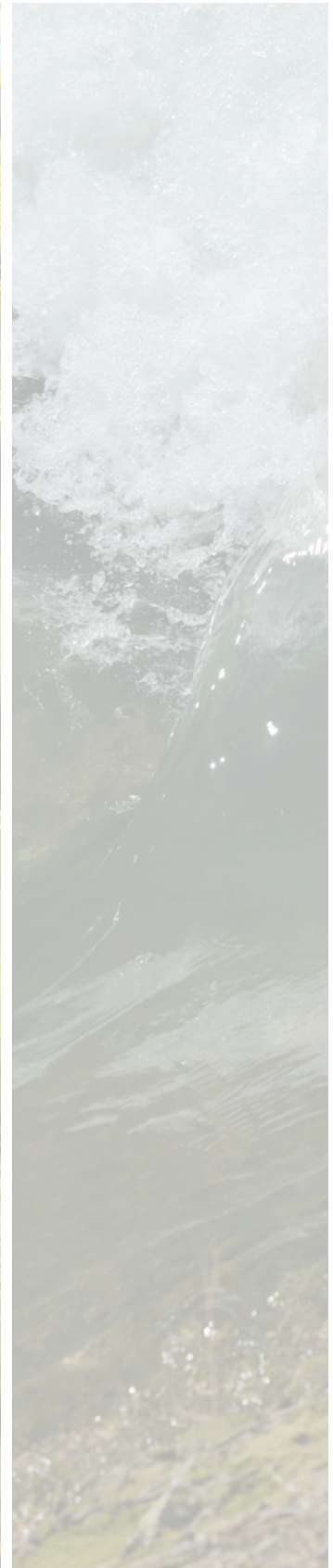
## ORV CONTROL UNITS

ORV models require a control unit to carry out the cleaning cycle. The control unit consists of a timer and the components required to activate such cycle (solenoids, connection fittings, and wiring).

The ORV models are served equipped with their control unit. They have an output for a general valve, which is activated during the entire cleaning cycle, ideal for controlling shut-off valves, starting for backup pump, stop of subscribers, etc.

CONTROL UNIT	
ITEM	CODE
<b>WITH TIMER</b>	
24VAC	462466
LACHT9-12V	462468
12VDC	462467
<b>WITHOUT TIMER</b>	
24VAC	462469
LACHT9-12V	462471
12VDC	462470





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Creando los caminos  
del agua

